

Kornkamon Chureeganon 2007: Effects of Cyproterone and Cyproterone Esters on Reproductive System in Male Rats. Master of Science (Zoology), Major Field: Zoology, Department of Zoology. Thesis Advisor: Miss Kantimane Phanwichien, Ph.D. 73 pages.

Several low doses, 0.45 mg/kg body weight were subcutaneously administered to adult male Wistar rats for every other day til 30 days, of cyproterone acetate (CPA), cyproterone (CPOH) and 3 cyproterone esters which the ester groups containing 10 (CPC10), 11 (CPC11) and 12 (CPC12) carbon atoms, to investigate the antiandrogenic action on testis and epididymis and the toxicity on the liver and kidney. By comparing with the control group (0.85% steriled normal saline injection) and the vehicle group (sesami oil injection), all treated groups revealed necrosis of the spermatogenic cells and spermatozoa. Among all treated groups, the most severe necrosis was observed in the CPC11 treated group whereas the less severe necrosis occurred in the CPOH treated group. For the epididymal epithelium, all treated groups showed no difference when compared to the control group. Histopathological findings, severe necrosis of hepatocytes and necrosis of both renal tubules and glomeruli were observed in all treated groups. The most severe necrosis of both liver and kidney was observed in the rats of the CPC11 treated group. On the contrary, the rats of the CPOH treated group was found to be less severe than those of the other groups. The results of this study indicate that all treated compounds have the antiandrogenic action, but these compounds have the side effects on both liver and kidney.

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